

## CLAIMS

### What is claimed is:

- 1 1. A network comprising:  
2 a plurality of network nodes;  
3 a plurality of routing devices to route network traffics between selected ones  
4 of said network nodes; and  
5 a director coupled to said routing devices to determine whether selected  
6 instances of source addresses of packets routed by said routing devices are spoof  
7 source addresses, based at least in part on one or more consistency measures.
- 1 2. The network of claim 1, wherein the director bases said determination on at  
2 least spatial distribution profiles of said source addresses, and in view of at least  
3 one reference source address spatial distribution profile.
- 1 3. The network of claim 2, wherein said at least one reference source address  
2 spatial distribution profile comprises at least a selected one of an exemplary spatial  
3 distribution profile for a non-spoof source address in general, and a historical spatial  
4 distribution profile for a particular source address.
- 1 4. The network of claim 1, wherein the director bases said determination on at  
2 least destination source address range (DSAR) distribution profiles of said source  
3 addresses, and in view of at least one reference DSAR distribution profile.

1 10. The network of claim 1, wherein the director is further equipped to determine  
2 whether filtering actions are to be taken to filter out packets with source addresses





1 22. The method of claim 20, wherein said determining comprises determining  
2 whether each of the DSAR distribution profiles of the source addresses is within a  
3 resemblance tolerance limit when compared to each of the at least one reference  
4 source address DSAR distribution profile.

1 23. The method of claim 20, wherein said at least one reference DSAR  
2 distribution profile comprises at least a selected one of an exemplary DSAR  
3 distribution profile for a non-spoof source address in general, and a historical DSAR  
4 distribution profile for a particular source address.

1 24. The method of claim 15, wherein said determination is made based at least in  
2 part on migration distribution profiles of said source addresses, and in view of at  
3 least one reference migration distribution profile.

1 25. The method of claim 24, wherein said determining comprises constructing  
2 said migration distribution profiles of said source addresses.

1 26. The method of claim 24, wherein said determining comprises determining  
2 whether each of the migration distribution profiles of the source addresses is within  
3 a resemblance tolerance limit when compared to each of the at least one reference  
4 source address migration distribution profile.

1 27. The method of claim 24, wherein said at least one reference migration  
2 distribution profile comprises at least a selected one of an exemplary migration



1 33. The method of claim 32, wherein said where determination comprises taking  
2 into consideration where packets of non-spoof instances of a source address having  
3 instances deemed to be spoof source addresses are likely to be routed in said  
4 network.

1 34. An apparatus comprising:

2 (a) a storage medium having stored therein a plurality of programming  
3 instructions designed to implement a director to receive reporting of information  
4 associated with source addresses of packets routed through a plurality of routing  
5 devices of a network, and to determine whether at least some instances of said  
6 source addresses are spoof instances; and

7 (b) a processor coupled the storage medium to execute the programming  
8 instructions.

1 35. The apparatus of claim 34, wherein said programming instructions are  
2 designed to make said determination based on at least spatial distribution profiles of  
3 said source addresses, and in view of at least one reference source address spatial  
4 distribution profile.

1 36. The apparatus of claim 35, wherein said programming instructions are  
2 designed to be able to construct said spatial distribution profiles of said source  
3 addresses.

1 37. The apparatus of claim 35, wherein said programming instructions are  
2 designed to be able to determine whether each of the spatial distribution profiles of





1 47. The apparatus of claim 34, wherein said programming instructions are  
2 designed to be able to determine whether filtering actions are to be taken in said  
3 network to filter out at least some packets having source addresses deemed to be  
4 having spoof instances, and if filtering actions are to be taken, further determine  
5 where among a plurality of routing devices, said filtering actions are to be taken.

1 48. The apparatus of claim 47, wherein said programming instructions are  
2 designed to take into consideration where packets of non-spoof instances of a  
3 source address having instances deemed to be spoof source addresses are likely to  
4 be routed in said network, when making said where determination.

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